

# UNITED STA 3 DEPARTMENT OF COMMERCE Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		Α	TTORNEY DOCKET NO.
08/113,329	08\30\83	HARVEY		J 5	6348
					:
THOMAS J. SC	ነግሞሞ ተጠ	LM01/0804	$\neg$	E	XAMINER
HOWREY & SIM				·	1
1299 PENNSYL		N.W.		ART UNIT	PAPER NUMBER
WASHINGTON D	C 20006			2737	

DATE MAILED: 08/04/98

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

#### Office Action Summary

Application No. 08(113,329 Applicant(s)

HARVEY et al.

Examiner

**Andrew Faile** 

Group Art Unit 2737



⊠ Responsive to communication(s) filed on Apr 10, 1998
☐ This action is <b>FINAL</b> .
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.
A shortened statutory period for response to this action is set to expire3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).
Disposition of Claims
X Claim(s) 2, 3, 5, 7-11, 13, 16-20, 22, 23, 31-40, 42, 44, and 49-85 is/are pending in the application.
Of the above, claim(s) is/are withdrawn from consideration.
Claim(s)is/are allowed.
□ Claim(s) 2, 3, 5, 7-11, 13, 16-20, 22, 23, 31-35, 39, 40, 42, 44, 49-53, and 55-84/are rejected.
☐ Claims are subject to restriction or election requirement.
Application Papers
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on is ☐approved ☐disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.
Priority under 35 U.S.C. § 119
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.
received in Application No. (Series Code/Serial Number)
received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
*Certified copies not received:
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
Attachment(s)
☐ Notice of References Cited, PTO-892
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).
☐ Interview Summary, PTO-413
□ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152
SEE OFFICE ACTION ON THE FOLLOWING PAGES

Serial Number: 08/113,329

Page 2

Art Unit: 2737

DETAILED ACTION

1. The examiner notes that paragraph 19 of paper #22 indicated that claims 3-35 and 39 were

being rejected. This was an error. Paragraph 19 should have only listed claim 31-35 and 39 as

having been rejected. Appropriate correction has been made in this Office action.

2. The examiner notes that paragraph 21 of paper #22 indicated that claims 34-38 and 54

avoided the art of record; this was also reflected on the cover sheet of the Office action. This was

an error. The examiner notes that this paragraph should only have listed claim 36-38 and 54.

Again, appropriate correction has been made in this Office action.

3. The examiner acknowledges applicant's comments concerning the filed Supplemental

Information Disclosure Statements (see page 40 of his response). The examiner notes that the

only receipt date which has been stamped on the Disclosure Statement in question was the date

that it was received by the Group (i.e. 6/5/96). This is the reason that the Disclosure Statement

has been cited by the examiner according to the 6/5/96 date. However, the examiner also notes

that the Disclosure Statement includes an indication that applicant was charged by the Office for

the filing the Statement on 5/3/96 which is consistent with applicant's argument as to the date

which the statement actually filed with the Office (i.e. 4/5/96).

DOUBLE PATENTING BETWEEN APPLICATIONS

Art Unit: 2737

# 4. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	• 9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290

52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248

112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713

Page 6

Serial Number: 08/113,329

172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496

Serial Number: 08/113,329

238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506

Art Unit: 2737

304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

5. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The Appendix of paper #22 provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

- (1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant

Art Unit: 2737

should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications; or

resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the Appendix of paper #22 were merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

Failure to comply with the above requirement will result in abandonment of the application.

#### INFORMATION DISCLOSURE STATEMENTS

6. Receipt is acknowledged of applicant's Information Disclosure Statements filed 2/1/94, 6/6/94, 6/16/94, 2/17/95, 5/11/95, 1/4/96, 1/19/96, and 6/5/96 (i.e. 4/5/96). In view of the unusually large number of references cited in the instant application and the failure of applicant to point out why such a large number of references is warranted, these references have been considered in accordance with 37 C.F.R. 1.97 and 1.98 to the best ability by the examiner with the time and resources available.

Art Unit: 2737

#### CLAIM REJECTIONS - 35 USC § 112

- 7. Claims 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - 1) In claim 10, line 16, "the remote source" is indefinite because it has multiple antecedent basis when referred back to the source of line 6 and the source of line 10. Clarification is needed.

8. Claims 10,11,13,16,17,18,19,40,42, 44, 49-52, and 82 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention [see paragraph 8 of paper #22].

Art Unit: 2737

On page 43 of applicant's arguments filed 4/10/98, applicant comes to the conclusion that the limitations of each of the claims in question was supported by the disclosure as originally filed. However, applicant has failed to explain how the original disclosure provides support for each of these limitations when read in the context of the claim as a whole (i.e. failed to explain the basis for his conclusion). Clarification of the issues set forth in paragraph 8 of paper #22 are still needed.

#### Level of Skill in the Art ~ (preface to rejections under sections 102 and 103)

- 9. The examiner maintains that the following discussion evidences the level of skill in the art which existed at the time of applicant's alleged invention.
- 1. The examiner notes that local television broadcast stations, which only served small regional areas of a country (e.g. the USA), often lacked the financial resources required to create enough original television programming to fill their daily broadcast schedules. Thus, these local television stations became "affiliates" of a national television broadcast network (e.g. NBC, ABC, CBS, etc,...) whereby the national television network created original network television programming which could be transmitted to, and commonly rebroadcast by, all of the local affiliate stations. This arrangement allowed the cost of

Art Unit: 2737

creating such original programming to be divided among all of the affiliate stations thereby reducing the cost to any one of the affiliates.<sup>1</sup>

- 2. While in practice it was feasible to fill the affiliate stations' entire local broadcast schedules with network programming, such was not desirable. Specifically, there still remained a need to supplement said network programming with locally originated programming tailored specifically to the needs and interests of the local audiences (e.g. local news programs, local commercials, etc,...).<sup>2</sup>
- 3. To accomplish the above, an arrangement was established in which a national broadcast station would nationally broadcast network programming to all of its affiliate stations in accordance with a strict network broadcast schedule. This strict network broadcast schedule included scheduled "breaks" in the network programming which were then made available to the local affiliate stations for the purpose of inserting locally originated programming. This locally originated programming was known to have included

<sup>&</sup>lt;sup>1</sup> SEE the first 23 lines in the second full paragraph on page 85 of the article "Master Control Techniques" by <u>Marsden</u> which was published in volume 9 of the "Journal of the Television Society" in 1959.

<sup>&</sup>lt;sup>2</sup> Note: the first 23 lines in the second full paragraph on page 85 of the article "Master Control Techniques" by <u>Marsden</u> which was published in volume 9 of the "Journal of the Television Society" in 1959.

Note: lines 2-9 in the second column on page 806 of the article "The Automation Of Small Television Stations" by Young et al. which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

<sup>&</sup>lt;sup>3</sup> Note: the last 11 lines on page 810 of the article "The Automation Of Small Television Stations" by <u>Young et al.</u> which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

Art Unit: 2737

previously broadcasted network programming which had been recorded for delayed rebroadcast.<sup>4</sup> The resulting combined programming was then broadcast to the local audiences the affiliate stations.

- 4. Early on, the local affiliate stations produced and inserted their own local programming into the network programming via a switching network which was controlled manually. However, as technology progressed, methods for automating various aspects of the program insertion/switching process developed. Such developments included:
  - 1) The development of automatic scheduling computers which could be programmed to execute a list of scheduled programming events whereby the list of events automatically controlled the sequence in which scheduled programming was produced and broadcasted from a respective broadcast. Such computers were used to automate both the network television stations and affiliate television stations.<sup>5</sup>
  - 2) The development of automated program cuing systems in which included: equipment located at the national network for embedding cuing signals into the

Note: U.S. Patent # 3,761,888 to Flynn which was published on 9/25/73.

Note: U.S. Patent # 3,627,914 to Davies which was published on 12/14/71.

Note: the publication "Microprocessor For CATV Systems" by Tunmann et al. Which was published by the Tele-

<sup>&</sup>lt;sup>4</sup> SEE: lines 25-41 in column 4 of U.S. Patent # 4,025,851 to <u>Haselwood et al.</u> which was published on 5/24/77.

<sup>&</sup>lt;sup>5</sup> Note: the last 11 lines on page 810 of the article "The Automation Of Small Television Stations" by <u>Young et al.</u> which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

Art Unit: 2737

broadcasted network programming whereby said cuing signals identified the beginning and the end of each scheduled "break" in network programming; and equipment located at the affiliate stations which used the embedded cuing signals to determined the respective beginning and the respective end of each scheduled network "break" and, based on this determination, automatically cause its own scheduled local programming to be inserted into said "breaks" prior to "rebroadcast".6

Because ones of the affiliate stations were located in different time zones, equipment was required to compensate the broadcasted network programming for these time zone differences; i.e. if the same network programming were to be broadcasted at the same local time throughout the entire country. This compensation was accomplished by delaying the broadcasted network programming which was provided to a given one of the affiliate stations, via a network of recording devices, as a function of the time zone in which the given affiliate station was located. Early on, due to the high cost of this delay equipment, compensation was provided only at the central network station. But subsequently, as the cost of the delay equipment came down and as the use of highly expensive satellite transmission paths increased, said delay equipment began be located

<sup>&</sup>lt;sup>6</sup> SEE: Australian Patent Document S.N. 074,619 by <u>Hetrich</u> which was published 4/29/1976.

SEE: U.K Patent Document S.N. 959,374 by Germany which was published 5/27/1964.

<sup>&</sup>lt;sup>7</sup> Note: the article "Automatic Control of Video Tape Equipment at NBC, Burbank" by <u>Byloff</u> which was published by the National Broadcasting Company, Inc. in 1959.

Art Unit: 2737

within ones of the affiliate station locations.<sup>8</sup> In any event, when network programming was delayed in this manner, it was understood that any "program related data" that was carried with the network programming (e.g. such as the network cuing signals; network program monitoring codes; etc,...) also had to be delayed by the delay equipment in order to have maintained their precise timing relationship with said network programming.<sup>9</sup>

#### CLAIM REJECTIONS - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

<sup>&</sup>lt;sup>8</sup> SEE: the publication "Video Banks Automate Delayed Satellite Programming" by Chiddix which was published in 1978.

SEE: the publication "The Digitrol 2~ Automatic VTR Programme Control" by <u>Skilton</u> which was published on pages 60-61 of the "International Broadcast Engineer" in march of 1981.

Note: lines 25-41 in column 4 of U.S. Patent # 4,025,851 to Haselwood et al. which was published on 5/24/77.

<sup>&</sup>lt;sup>9</sup> SEE: the first 7 lines in the first full paragraph of the third column on page 39 of the publication "Video Banks Automate Delayed Satellite Programming" by <u>Chiddix</u> which was published in 1978.

Art Unit: 2737

and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "AN AUTOMATED PROGRAMMING CONTROL SYSTEM FOR CABLE TV" by Beck et al.

#### I. The showing of Beck et al.:

Beck et al. disclosed a system which comprised:

- a) An on-line automation system which controlled video switching and machine functions in accordance with a daily program schedule which was stored on a diskette [see: the first paragraph on page 122; the first paragraph on page 124; and the eighth full paragraph on page 126]. Said on-line automation system included:
  - 1) A micro-controller and a micro-computer wherein, under software control, said micro-computer read the stored program schedule information from said diskette on a time sequence basis and transferred control commands to the micro-controller based on the sequentially read information [see the second paragraph on page 124];
  - 2) Said micro-controller which performed actual video switching by outputting video switching commands to a routing switcher based on said control commands [see the third paragraph on page 124]

Art Unit: 2737

3) Said micro-controller which, in combination with a machine control interface, performed actual machine control tasks based on said control commands [see the third through the fourth paragraphs on page 124]. The "machines" that were controlled comprised various types of television signal storage devices, e.g. video tape recorders, which are pre-loaded with storage mediums containing recorded television signals [note: the third through the fourth paragraphs on page 124; and the ninth full paragraph on page 126]. The "machine control tasks" which were controlled included the process of "randomly accesses" a video tape in order to locate and output the ones of prerecorded program material and commercials which had been scheduled for broadcast [see the fifth paragraph on page 124]. The ability to provide random access to such video tape was achieved by special "signal detecting" circuitry of said interface which operated to locate and identify recorded program material and commercials by sensing control track "signals"/pulses recorded on the video tape in accordance with data that was derived from the schedule information [note: the fifth paragraph on page 124; the tenth paragraph on page 124; the last 25 lines on page 125; and lines 25-29 on page 126]; and

4) Means for printing out a "Program Log" which lists the scheduled event as they actually occurred [note: the the sixth paragraph on page 124; and the sixth full paragraph on page 126].

Art Unit: 2737

b) the routing "switcher" which receives up to 40 different video inputs from various signal sources (e.g. said "machines", microwave feeds, AML feeds, etc,...) and which selectively routes ones of the 40 different inputs to 20 different output channels under control of said switching commands provided from said on-line automation system [note: the first paragraph on page 122; the sixth paragraph on page 122; and the third paragraph of the first column on page 124].

#### II. Obviousness:

The examiner notes that claim 84 states that the method included the logging of communicated "units"/programs "based on information or data provided by the signal detector". The examiner notes the term "based on" is undefined in the claim and therefor has been broadly interpreted to mean --a function of--.

The examiner maintains that it would have been obvious to one skilled in the art (if not inherent) for the "Program Log" in Beck et al. to have been derived (directly or indirectly) "based on" information or data provided by the signal detection circuitry in view that said "Program Log" represented a listing of the program material which was actually transmitted and not simply a listing of program material which was scheduled for for transmission; i.e. the detection of program material which was actually transmitted obviously/inherently was a function of (i.e. was "based on") the process of locating and identifying the program material which was to be transmitted.

Art Unit: 2737

12. Claims 10, 40, 42, 44, 56, 63 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "AN AUTOMATED PROGRAMMING CONTROL SYSTEM FOR CABLE TV" by Beck et al.

#### I. The showing of Beck et al.:

- A) SEE the preceding paragraph of this Office action.
- B) With respect to the limitations of claims 10 and 40, the following is noted: a) the schedule information stored on the diskette in <u>Beck et al.</u> corresponds to the recited "control signal" from a "remote source" in that the diskette, containing said "control signals", was produced at a location (i.e. the "Scheduling Department") which was remote from the on-line automation system (i.e. from the "Transmission Room") [note: the second and third full paragraphs on page 125; and the eighth full paragraph on page 126]. The label "remote source" used in these claims requires nothing more.
- 13. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "AN AUTOMATED PROGRAMMING CONTROL SYSTEM FOR CABLE TV" by Beck et al.

#### I. The showing of Beck et al.:

A) SEE the preceding paragraph of this Office action.

#### II. Differences:

A) The claim differs from the showing of <u>Beck et al.</u> Only in that the claim recites that the local programming sources (i.e. the "machines" of <u>Beck et al.</u>) record programming from the remote source (i.e. from one of the "feeds" in <u>Beck et al.</u>).

#### III. Obviousness:

Art Unit: 2602

- A) The examiner takes Official notice that it was notoriously well known in the art for affiliated television stations to have used local tape recorders to record programming received on incoming "feeds" so as to delay their broadcast and thereby compensate for differences in time zones. The examiner maintains that it would have been obvious to one skilled in the art to have used the "machines" in <u>Beck et al.</u> to record programming from one of its feeds so as to compensate for such time zone differences.
- 14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Haselwood et al</u>. [US Patent # 4,025,851] in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u> as was set forth in paragraph 10 of paper #22.
  - I. The examiner maintains that applicant's arguments filed 4/10/98 attempt to overcome the applied prior art of record by, among other tactics, trying to establish an unrealistically low level of skill in the art. Being such, applicant's arguments filed 4/10/98 have been fully considered but are not persuasive. The following is noted:
    - A) In lines 7-9 on page 48 of his arguments, applicant alleges that <u>Haselwood</u> "does not disclose or suggest the claimed step of 'storing at least one received unit'" at the affiliate stations. Applicant further alleges that "none of the embodiments disclosed by Haselwood have even the capability of storing the received units of programming." Applicant's allegations are clearly wrong. The examiner points out that <u>Haselwood</u> explicitly states that the "LOCAL"

PROGRAM SOURCE" (44 of figure 3), which was contained within the affiliate

Art Unit: 2602

stations (18 of figure 1), comprised a video tape recorder for playing back video taped programs including the playback of network programs that had been previously taped/"stored" for delayed broadcast [see lines 36-38 of column 4].

Haselwood also explicitly taught that these "stored" and played network programs were previously taped/"stored" from the network programming which were received from the network station via the network feed (16 of figure 1) [see lines 25-33 of column 3]. Clearly, said "LOCAL PROGRAM SOURCE" (44 of figure 3) in Haselwood comprised means for storing and playing at least one unit of network programming, e.g. a network program, which had been received from the remote network station.

B) In the first full paragraph on page 49 of applicant's arguments, applicant disagrees with the examiner position that the affiliate station in <a href="Haselwood">Haselwood</a> must have comprised some sort of control circuitry for controlling the program selector and the local sources to perform the tasks required of them. Specifically, applicant alleges that <a href="Haselwood's">Haselwood's</a> contemplated program selection could have been accomplished "manually" by the affiliate station operator(s) "without any circuitry at all". Given such arguments, applicant is asked to explain how local programming could be selected by the illustrated local source and the illustrated program selector of <a href="Haselwood">Haselwood</a> "without any circuitry at all"- i.e. could it be applicant's position that the program selection and switching process in <a href="Haselwood">Haselwood</a> was controlled telepathically by the affiliate station operator(s)?.

While the examiner agrees with applicant's position that the program selection and

Art Unit: 2602

switching process discussed in <u>Haselwood</u> could have been accomplished "manually" by station operator(s), the examiner strongly disagrees with applicant's allegation that said process could have been accomplished "without any circuitry at all". Specifically, even if said program selection in <u>Haselwood</u> were performed under the "manual" control of the affiliate station's operator(s), this manual operation still would have required some sort of control circuitry (e.g. a master control panel or at least control switches) by which program selection and switching commands/signals could be inputted into the system by said operator(s) thereby directing the illustrated program selector and the illustrated local sources to perform their required tasks. Applicant's arguments to the contrary appear to be an attempt to refute the applied prior art of record based on an unrealistically low level skill in the art or at least evidences a misunderstanding of the examiner's position.

C) For emphasis, the examiner notes that he has taken no position as to how the program selection and switching process performed by the affiliate station described in <a href="Haselwood">Haselwood</a> was accomplished; i.e. as to whether it was accomplishes automatically or manually. Indeed, the method which was to be used to perform this task was not specified by <a href="Haselwood">Haselwood</a> and therefor one cannot conclude that it was accomplished using the automatic approach. However, as to the obviousness of having implemented <a href="Haselwood">Haselwood</a> using the automated approach, the examiner has and continues to take the position that the prior art by <a href="Young">Young</a> showed: that the control circuitry which was needed to have implemented an automated approach of

Art Unit: 2602

program selection and switching process within affiliate television stations, e.g. those described in <u>Haselwood</u>, was notoriously well known in the art at the time of applicant's alleged invention; and that said automated approach of program selection and switching was known to have been desirable and to have had significant advantages over the manual program selection and switching approach (i.e. providing clear motivation for combining <u>Young</u> and <u>Haselwood</u>). For example, <u>Young</u> taught that the automated approach relieved the burden imposed on the affiliate station operator(s) of monitoring the network programming so as to manually select and switch the programming at the required/appropriate times.

- D) The examiner does not understand applicant's comments made in lines 20-23 of page 49. Clarification is requested.
- E) With respect to the arguments set forth in lines 14-17 on page 50 of applicant's argument's, applicant is requested to point out where claim 5 includes any limitations which required the "broadcasting from Applicant's [recited] intermediate transmission station [to be] accomplished entirely on an automated basis"; i.e. support applicant's argument. Clarification is also needed to set forth exactly what applicant means by the expression "entirely on an automated basis".
- F) In the last paragraph on page 50, applicant again questions the motivation used by the examiner in combining the teachings of <u>Haselwood</u> with the teachings of <u>Young</u>. More specifically, applicant seems to suggest that the references teach away from the combination in that applicant asks: why one skilled in the art would have been motivated to monitor programs being broadcast from an affiliate station

Art Unit: 2602

when "they know in advance" what programs are going to be broadcast, because "they" prepared the "to be broadcast" list in the first place? The examiner points out that even if the network prepared the "to be broadcast" list for its affiliates they, at best, the network would still only have known what programs it scheduled for broadcast from its affiliate stations. The network still would have no way of knowing what programs were actually broadcast from said affiliate stations which is the reason/motivation why the network monitors the broadcasts of its affiliates in the first place; i.e. nothing is changed by the proposed combination. Thus, the references do not teach away from the combination as seems to have been suggested by applicant.

G) In the last 9 lines on page 47 of the arguments, applicant states that 
Haselwood "may contemplate" using program identification codes however, 
applicant alleges, Haselwood "ultimately rejects" the use of program identification 
codes as being too complicated for his needs. Applicant's allegation is, at best, 
misleading. While it is true that Haselwood indicates that the transmission of 
program identification codes were not necessary in view that the broadcasted 
programs could be identified through addition processing [see lines 1-5 of column 
6], Haselwood nonetheless explicitly recognized the obviousness of having 
included program identification codes as an alternative to said addition processing 
[SEE lines 51-66 of column 5]. Nowhere has Haselwood "rejected" the use of 
program identification codes as has been alleged by applicant's arguments.

Art Unit: 2602

II. The remainder of applicant's argument's appear to be focus on the alleged failure of the applied prior art in meeting the recited "computer" terminology of pending claim 5. The examiner notes the following:

- a) The examiner continues to take the position that the term "computer", by definition, simply refers to "processing circuitry which operates to compute". Being such, a "computer" may include only one programmable processor which operates under software control (i.e. one CPU or MPU) or, alternatively, it may include a plurality of programmable processors which operate under software control (i.e. a plurality of CPUs or multiple MPUs). If applicant disagrees with this definition, then applicant should point out how and where the recited term "computer" has been defined in applicant's original disclosure so as to have a more specific meaning.
- b) If applicant accepts the examiner's position that the term "computer" simply refers to processing circuitry "which computes", then the examiner maintains that the showing of the applied prior art meets all of the "computer" limitations of claim 5 regardless of the fact that the CPU/MPU which was used to monitor the affiliate station broadcasts was different from the CPU/MPU that was used to control the program selection and switching at the affiliate station of the applied prior art; i.e. both CPUs/MPUs taken together still represent processing circuitry which operates "to compute". Again, if applicant disagrees with the examiner's interpretation of the recited term "computer", then applicant must point out where applicant's original disclosure defined the recited term "computer" so as to

Art Unit: 2737

prohibit/exclude it from being read on a plurality of programmable processors.

Clarification is needed.

15. Claims 2,3, 8, 9, 10, 11, 13, 16, 18, 19, 49, 50-52, 56-71, 75 -78, and 80-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Haselwood et al</u>. [US Patent # 4,025,851] in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u> as was set forth in paragraph 11 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

16. Claim 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Haselwood et al</u>. [US Patent # 4,025,851] in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u> and further in view of the publication "Microprocessor for CATV Systems" by <u>Tunmann et al</u> as was set forth in paragraph 12 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

Art Unit: 2737

17. Claims 20, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haselwood et al. [US Patent # 4,025,851] in view of the publication "The Automation of Small Television Stations" by Young et al and further in view of Kamishima et al. [JP 56-51161] for the reasons that were set forth in paragraph 13 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

18. Claims 31,50, 51, 53, 55 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Haselwood et al.</u> [US Patent # 4,025,851] in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u>, the publication "The Digitrol 2~Automatic VTR Programme Control" by <u>Skilton</u>, and further in view of <u>Kamishima et al.</u> [JP 56-51161] for the same reasons that were set forth in paragraph 14 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

19. Claims 2,3,10,11, 13, 19, 31, 51, 53, 55-71, 75 -78, and 80-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "Microprocessor for CATV Systems" by <u>Tunmann et al</u> in view of in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u> and the publication "The Digitrol 2~Automatic VTR Programme Control" by <u>Skilton</u> for the reasons that were set forth in paragraph 15 of paper #22.

Art Unit: 2737

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive. The following is noted:

On page 57 of applicant's arguments, applicant appears to allege that one of ordinary skill in the art would have had no motivation for implementing at least some of the "sources of local television programming" described in <u>Tunmann et al.</u> using conventional VTRs loaded with cassette tapes containing pre-recorded local television programming. The examiner maintains that such an allegation is clearly based on an unrealistically low level of skill in the art. Specifically, the examiner maintains that it was notoriously well known to those skilled in the art at the time of applicant's alleged invention for the "local programming sources" of conventional CATV "headends"/"affiliates" to have comprised VTRs loaded with cassette tapes containing recorded local programming (e.g. local commercials); i.e. this fact at least being exemplified in the showings of <u>Young et al.</u> and <u>Skilton</u>. Being such, the examiner continues to maintain that it would at least have been obvious to one skilled in the art to have implemented the local sources of programming in <u>Tunmann et al</u> using a conventional local source implementation with said well known VTRs.

20. Claims 5, 8, 9, 50, 51, 52, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "Microprocessor for CATV Systems" by <u>Tunmann et al</u> in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u> and the

Art Unit: 2737

publication "The Digitrol 2~Automatic VTR Programme Control" by <u>Skilton</u> for the reasons that were set forth in paragraph 16 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the system disclosed in the publication "Microprocessor for CATV Systems" by <u>Tunmann et al</u> in view of the publication "The Automation of Small Television Stations" by <u>Young et al</u>, the publication "The Digitrol 2~Automatic VTR Programme Control" by <u>Skilton</u>, and <u>Haselwood et al</u>. [US Patent # 4,025,851] for the reasons that were set forth in paragraph 17 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

22. Claims 72-74, 81, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetrich in view of Young et al. for the reasons that were set forth in paragraph 18 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive. The following is noted:

a) As indicated by its title and by the first paragraph on page 2, the invention disclosed in the document by <u>Hetrich</u> explicitly pertained to a "broadcast network signaling system and method" which was used to transmit control signals or "que's" to member stations (i.e. affiliates) of a network of *radio or television* stations;

Art Unit: 2737

b) While examiner does not dispute the fact that the "broadcast network signaling system and method" disclosed by Hetrich was described primarily in terms of its use in the radio program broadcasting/distribution environment, the examiner strongly disagrees with applicant's attempt simply to dismiss the application of Hetrich's system/method to the television program broadcasting/distribution environment as being an "afterthought" [see the last 10 lines on page 58 of applicant's arguments]. The examiner also believes that it is ridiculous for applicant to suggest that one skilled in the art would have viewed art relating to the distribution of "radio programming" and art relating to the distribution of "television programming" as "non-analogous" art. To the contrary, there is often no way in which two clearly related arts could be more "analogous" than those pertaining to the distribution of radio and television programming [see APPENDIX I and II. Of this Office action].

c) The examiner maintains that one skilled in the art would have had no problem in applying the teachings of the Hetrich disclosure to the television program broadcast/distribution environment. This is particularly true in view that such systems/methods for transmitting control signals or "ques" to member stations (i.e. "affiliates") of a network of television stations were in fact notoriously well known in the art at the time of applicant alleged invention<sup>10</sup>. The reason that the Hetrich reference was selected and applied in the present rejection, i.e. over other ones of the prior art of record, was the fact that Hetrich explicitly recognized the desire of having used such transmitted

<sup>&</sup>lt;sup>10</sup> Note the prior art by Millar [UK #1,370,535] which was cited in preceding section of this Office action..

Art Unit: 2737

control signals (or "ques") specifically for the purpose of controlling the recording of network programming by the member stations (i.e. by the "affiliates"); i.e. whereby the recorded programming was then available for delayed broadcast by said member station<sup>11</sup> [again, SEE the last four lines on page 10 of the <u>Hetrich</u> document].

d) Applicant is reminded that the applied prior art of record, including the Hetrich document, should not be read in a vacuum. Specifically, the applied prior art must be considered in terms of what it would have taught and suggested to one of ordinary skill in the art at the time of applicant's alleged invention; i.e. one who had knowledge and understanding of the existing state-of-the-art as has been addressed throughout this Office action.

23. Claims 31-35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetrich in view of Young et al. for the reasons that were set forth in paragraph 19 of paper #22.

Applicant's arguments filed 4/10/98 have been fully considered but they are not persuasive for the same reasons that were fully addressed in the preceding paragraph of this Office action.

Note that the previously discussed <u>Haselwood</u> patent [US #4,025,851] evidences a conventional television program distribution system, comprised of a network of member stations (i.e. "affiliates"), in which network television programming was distributed to the affiliate stations so that it could be recorded for delayed broadcast by said affiliates. <u>Haselwood</u>, however, did not describe transmitting control signals (or "ques") from the network station to its affiliate for the purpose of controlling said recording of distributed network programming by the affiliates. However, the document by <u>Hetrich</u> does.

Art Unit: 2737

Claim 31, 65, 78, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication "The Automation of Small Television Stations" by <u>Young et al.</u> in view of <u>Germany</u> [UK #959,274].

#### I. The showing of Young et al.:

Young et al. disclosed a system which was used in order to have automated the operation of the "affiliate" television stations of a television network. As evidenced in figure 3, the automated affiliate stations comprised:

for controlling the operation of plurality of "machines" which function as local sources of recorded television programming (e.g. VTRs, CARTS, etc,...);

2) a matrix switch, labeled "VIDEO AUDIO SWITCHER", which receives television programming from a wide range of sources and selectively outputs the received programming to a transmitter (labeled "XMTR"). Said received programming may include any of the following: recorded programming provided from said machines; live programming provided from studios (labeled "STUDIOS"); and network programming provided from remote network

1) interface circuitry, labeled "MACHINE INTERFACE", which outputs signals

3) a machine and switcher control panel, labeled "MACH & SWR CONT PANEL", which allows the operator of the affiliate station to manually control the operation of the machines and of the switcher;

television stations(i.e. labeled "NET's");

Art Unit: 2737

4) a CPU, labeled "CPU", which allows the operator of the affiliate station to automatically control the operation of the machines and of the switcher based on schedule information received by the CPU from an input device (i.e. from the "CARD READER" or from the "KEYBOARD).

In the automated mode of operation, the CPU controls the "video switcher" by executing a scheduled sequence of "events" in a timed sequence whereby, at any given instance, a selected one of the programs received at the input to the switcher is outputted to the transmitter. In those instances when the selected program to be transmitted corresponds to one of the recorded programs, said CPU also controls the machines to output the selected program.

#### The following is noted:

a) Young et al. recognized that problems could arise when the automation affiliate station described above was used to automatically insert locally produced programming (i.e. commercials) into scheduled "breaks" of receive network programming. Specifically, because the execution of the "events" in the automated mode of operation was performed strictly in accordance with "real time", any error in the timing of these scheduled network "breaks" would result in over- or underrunning of the locally produced programming; Young et al. noted that this problem was particularly acute in situation where the network station itself was not automated and/or did not adhere to a strict broadcast schedule [see: the last 10 lines on page 810; and the first 2 lines on page 811].

Art Unit: 2737

#### II. Differences:

The claims differ from the showing of Young et al. only in that the claims recited that a signal is transmitted from a remote source which is used by the computer to control the switch.

#### III. The showing of Germany:

Germany has been cited because it evidences that it was well known in the art for the network stations of conventional television networks to have comprised means for inserted "cuing signals" into their network programming to facilitate the insertion of local programming into the scheduled "breaks" of the network programming. In Germany, the inserted "cuing signals" identified the beginnings and ends of respective network "breaks" and were used, at the affiliate stations, to trigger a control device so as to have automatically caused the insertion of the locally produce programming into said "breaks" in the network programming.

#### IV. Obviousness:

In at least those situations where the network station was not automated and/or did not adhere to strict broadcast schedules, it is maintained that it would have been obvious to one skilled in the art to have modified the system disclosed by Young et al., e.g. in accordance with the teachings of Germany, so as to have triggered the CPU to have inserted the local programming into the "breaks" of the network programming based on "cuing signals" which were embedded in the network programming. Such a modification

Art Unit: 2737

would have been advantageous in that it would have eliminated the over- and underrunning problems that were described in <u>Young et al.</u>

25. Claims 2-16, 18-35, 37-53, and 55-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined showing of <u>Young et al.</u> and <u>Germany</u> as was set forth in the preceding paragraph of this Office action, further in view of <u>Hetrich</u> [Australia #74,619] and <u>Haselwood et al.</u> [US Patent #4,025,851].

#### I. The combined showing of Young et al. and Germany:

The examiner maintains that it would have been obvious to one skilled in the art to have modified the system disclosed by Young et al based on the teachings of Germany for the reasons that were addressed in the preceding paragraph of this Office action.

#### II. Differences:

The claims differ from the combined showing of Young et al and Germany only in that the claims require the affiliate stations to have been capable of selectively recording network television programs under the control of signals transmitted from said the network station along with the network programming.

#### III. The showing of Hetrich and Haselwood et al:

As with <u>Germany</u>, <u>Hetrich</u> also disclosed circuitry for adding cuing signals to the programming broadcasted from a network station so as to control operations at the affiliate stations (see "APPENDIX I" of this Office action). However, unlike <u>Germany</u>, <u>Hetrich</u> recognized explicitly recognized the desire to have used the embedded cuing

Art Unit: 2737

signals so as to have controlled the recording of network programming by the affiliate stations (see the last four lines on page 10 of Hetrich). While it is true that Hetrich describes this controlled recording feature specifically terms the application of his disclosed system to the radio environment, adding this automated recording feature to the television environment would have at least been obvious to one skilled in the art in view of the fact: a) that the Hetrich disclosure was broadly directed to radio and television broadcast networks; and b) that Haselwood et al. evidenced that the need and desire for the affiliate stations to have recorded network programming in the television network environment was also notoriously well known in the art (note lines 36-38 of column 4 in Haselwood et al.).

#### IV. Obviousness:

In view of the teachings provided by Hetrich and Haselwood et al., the examiner maintains that it would have been obvious to one skilled in the art to have further modified the modified system of Young et al. and Germany so as to have automatically controlled the recording of network programming at the affiliate station in response to the cuing signals that were embedded within the network programming. The examiner maintains that this further modification simply represents an obvious design choice of adding another well known feature and desirable feature to the broadcast network (note "APPENDIX II." of this Office action).

Art Unit: 2737

#### V. THE MODIFIED SYSTEM (as applied to the claims):

A. With respect to the modified system disclosed by <u>Young et al.</u>, <u>Germany</u>, <u>Hetrich</u> and <u>Haselwood et al.</u>, the following is noted:

- a) The affiliate television station of the modified system corresponds to the intermediate station of applicant's claims in view that it was located between the network station and the local television receiver;
- b) The network television station of the modified system corresponds to the recited remote station of applicant's claims in view that is provides units of network programming and embedded cuing signals to the affiliate stations;
- c) The logic of the CPU located at the affiliate station of the modified system corresponds to the computer of the claims in view that: it receives a programming schedule which has been inputted to and stored within the memory of the CPU; and it determines and selects how and when local units of programming (e.g. studio programming, locally recorded programming, locally recorded network programming, etc...) are provided by the local sources of programming for insertion into the received network programming based on cuing signals that were inserted into the network programming at the network station;
- d) The recorder device located at the affiliate stations of the modified system which operates to store and playback network programs in response to the embedded cuing signals correspond to the storage device of the pending claims;
- e) The cuing signals of the modified system correspond to the recited signals of the claims in that they at least identify those units of network programming which

Art Unit: 2737

were to have been recorded by the affiliate stations and to identify those units of network programming which were to have been rebroadcast in place of the scheduled local programming.

#### B. The examiner further notes the following:

1) While the affiliate stations of the modified system set forth above comprised local stations within a broadcast environment and therefor only received programming from a single network station and only outputted scheduled programming on one output channel, the examiner takes Official Notice that it was notoriously well known in the art for local stations (namely CATV headends) to have received programming from a plurality of networks and to have outputted scheduled programming on a plurality of output channels<sup>12</sup>. Replicating and/or extending the circuitry of the modified system so as to have controlled a conventional CATV headend to have automatically outputted programming on a scheduled basis would have been both obvious to and well within the level of one skilled in the art in view that the burden faced by a CATV station operator far exceeded that which was faced by the operator of a "single" affiliate broadcast station; e.g. thus, the need/desire for automation of the local CATV headend was obviously that much greater.

 $<sup>^{12}</sup>$  Note the publication "AN AUTOMATED PROGRAMMING CONTROL SYSTEM FOR CABLE TV" by Beck et al..

Art Unit: 2737

26. The examiner notes that the prior art has been applied to the claims to the extent of the examiner's understanding in view of the section 112 problems note above.

27. Claims 36-38, 54 and 85 avoid the art of record.

\*

### **APPENDIX I: (HETRICH)**

In spite of the fact that <u>Hetrich</u> explicitly stated that his "present invention" related to a system "for transmitting control signals or 'que's' to the member stations of a network of radio <u>or</u> <u>television stations</u>"[emphasis added], applicant still contends that the teachings of <u>Hetrich</u>'s disclosure pertained only to the distribution of radio programming and said teachings were unrelated to the distribution of television programming. The examiner strongly disagrees for the following reasons:

A) Referring to figure 1 of the publication, <u>Hetrich</u> set forth the configuration of his "present invention". More specifically, <u>Hetrich</u> illustrated a network of broadcast stations which comprised: a master station "10" which was described as having included any suitable conventional program source "12"; individual member stations "16" which were described as having included a program utilizer "18" which could be entirely conventional in its operation; and a transmission system which employed network lines "14" for interconnecting the master station to the member stations.

Art Unit: 2737

The examiner points that conventional television broadcast networks were known to have comprised this same configuration. Specifically, as exemplified by <u>Haselwood et al.</u>, conventional television networks were known to have comprised: a network/"master" station (represented by elements 10,12,14, and 22 of figure 1) which included a suitable source of network programming (represented by element 10); individual network outlets (18 of figure 1) which comprised affiliated/"member" television stations (figure 2); and a transmission system employing network feeds/"lines" (16) for interconnecting the network station to the affiliate/member stations network feed for connecting the network station to

B) Referring to figure 1 of the publication, <u>Hetrich</u> further set forth the configuration of his "present invention" wherein said master station included a "NETCUE" transmitter "20" which operated to insert cuing signals into the network programming prior to the transmission of the network to the member stations. At the member stations these cuing signals were extracted by a receiver "22" and were used to control various program selection and control operations at the member stations.

Given the above, the examiner again points that conventional television broadcast networks were known to have comprised this same configuration. Specifically, as exemplified by <u>Germany</u>, the network/"master" station of conventional television networks were known to have included a cuing signal transmitter (see figure 2) which operated to insert cuing signals into the network programming prior to the transmission of the network programming to the affiliate/"member" stations. At the affiliate/member

Art Unit: 2737

stations these cuing signals were extracted by a receiver (see figure 1) and were used to control various program selection and control operations at the member stations.

In view of the above, the examiner maintains that one skilled in the art would have recognized that the teaching provided by <u>Hetrich</u> pertain both to conventional radio network and to conventional television networks; i.e. <u>as was explicitly stated by Hetrich</u>. Applicant's arguments to the contrary seem to be based on an unrealistically low level of skill in the art.

## **APPENDIX II.: (HETRICH AND HASELWOOD)**

It was notoriously well known in the radio and television broadcast arts for a radio/television broadcast network to have been comprised of a plurality of radio/television stations including one national network radio/television station and a plurality of local affiliate radio/television stations. The examiner maintains that this was the level of skill in the art on which both the Hetrich and Haselwood et al. disclosures were based. More specifically, the examiner maintains that one of ordinary skill in the art would have known that the Hetrich disclosure was broadly directed to either of the radio and television broadcast network environments (see figure 1 and the first four lines on page two of the publication) while the disclosure in Haselwood et al. was directed specifically to the television broadcast network environment. The following is noted:

Art Unit: 2737

A) Haselwood et al. illustrates that it was conventional described a television distribution network comprised of a plurality of television stations and, more specifically, described a network in which a network station (represented by elements 10,12,14, and 22 of figure 1) transmitted network television programming over a network feed (16 of figure 1) to a plurality of network outlets comprised of "affiliated" television stations (18 of figure 1). Each of the affiliated television stations comprised: a) means for receiving the network programming from the network station (18 of figure 3); b) a program source (44 of figure 3) which included means for selectively recording network television programs contained within programming received from the network station so that the recorded network programs could be played back and broadcasted from the affiliate station with an appropriate/desired time delay; c) said program source (44 of figure 3) which included means for producing and outputting local programming (i.e. such as local news programs and local commercials); d) a program selector (46 of figure 3) which has a plurality of inputs for receiving the transmitted network programming directly from the network station, for receiving the delayed network programs which were played back from the program source (44 of figure 3), and for receiving the local programming provided by the local source (44 of figure 3); e) said program selector (46 of figure 3) which comprised an output for outputting a desired one of the television programs which are provided to its plurality of inputs; and f) a transmitter (42 of figure 3) for transmitting the programs which are selectively outputted from the program selector to a plurality of standard television receivers (not shown in the figure). The following is noted:

- 1) The network television station in <u>Haselwood et al.</u> comprised means for inserting codes into the network programming which it transmitted to the affiliate stations (note elements 12, 14, and 22 of figure 1). The codes were ultimately used in the network disclosed by <u>Haselwood et al.</u> for monitoring how the distributed network programming is broadcasted from the affiliate stations.
- B) Hetrich described a radio or television distribution network which was comprised of a plurality of radio or television stations. As in the case of Haselwood et al., the network disclosed by Hetrich also comprised a network station (10 of figure 1) for producing network programming which was distributed over a network feed (14 of figure 1) to a plurality of affiliate stations (i.e. 16 of figure 1). Further, it is clear from the description in Hetrich that the affiliate stations of his network at least operated in a corresponding, if not the same, manner that was described for the affiliate station of Haselwood et al. network; e.g. the affiliate stations of both networks operated to selectively broadcast ones of received network programming, delayed/recorded network programming, and locally produced programming [note the last four line on page 10 of Hetrich]. The following is noted:
  - 1) As in the case of <u>Haselwood et al.</u>, the network station in <u>Hetrich</u> also included means for inserting codes into the network programming which was distributed to the plurality of affiliate stations [note element 20 and "node A" in figure 1 of <u>Hetrich</u>]. However, unlike <u>Haselwood et al.</u>, the codes in <u>Hetrich</u> comprised control signals (or "ques") which were used to initiate various affiliate station

Art Unit: 2737

operations (i.e. switching operation; recording operations, etc,...) [SEE the last four line on page 10 of Hetrich].

C) The examiner maintains that Haselwood et al. and Hetrich disclosed different features of a common/corresponding television program distribution networks. Specifically, that Haselwood et al. disclosed a method by which a network television broadcast station could embed codes into its network programming for the purpose of monitoring how its broadcasts were used/rebroadcast by its affiliate stations, and that Hetrich was directed to a method by which said network station could embed codes into its network programming for the purpose of controlling various program switching and recording operations occurring within the affiliate stations. In fact, it was widely recognized by those skilled of ordinary skill in the art at the time of applicant's alleged invention that network broadcast stations could embed codes into its network programming so as to provide numerous different types of control operations, switching operations, monitoring operations, data services, etc...<sup>13</sup>. Clearly, each type of embedded code provided a different and useful feature to the television broadcast network and, therefor, one skilled in the art would have at least been motivated to have included as many of the features within a given system as was physically/economically/reasonable possible. The actual selection of the features to be included would have been a choice of design.

SEE: the discussion under the heading "Programme source identification" which begins on page 43 of the document "A System of Data Transmission in the Field Blanking Period of the Television Signal" by P.R. Hutt; and the abstract and conclusion sections of the publication "The Vertical Interval: A General-Purpose Transmission Path" by Ted V. Anderson.

Art Unit: 2737

\*

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Faile whose telephone number is (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

DEH 9/2/97

ANDREW I. FAILE SUPERVISORY PATENT EXAMINER GROUP 2700